

# THE PLOTTER

CLACKAMAS COUNTY AREA T/S  
USERS GROUP  
NEWSLETTER

\*\*\*

VOLUME 2, NUMBER 7

\*\*\*\*\*

EDITED BY: ROD GOWEN.  
CHAIRMAN: RICK READ  
V-CHAIRMAN: DENNIS JURRIES  
SEC/TREAS: ROD GOWEN  
PR OFFICER: BOB EVANS  
LIBRARIAN: LAURA GOWEN

## MEETINGS

Back from vacation and back to my old friend- my T/S Computer. Hope you are all having a nice summer.

Our June meeting was held in Room 101 of the Community Center on the CCC campus. We were called to order at 7:35 by our newly elected VICE-CHAIRMAN, Dennis Jurries. This new office was created to take care of the times when the Chairman is unable to make it.

After the announcements the Old Business was brought up.

We voted to subscribe to Sinclair Computing and T-S Horizons as soon as we start to receive ZX Computing.

New Business was called for-

We voted to skip the July meeting and to combine out July-August newsletter. This last was to give your overworked Editor a rest. Thank you.

We adjourned at 8:00 PM and went on to demos and individual discussions.

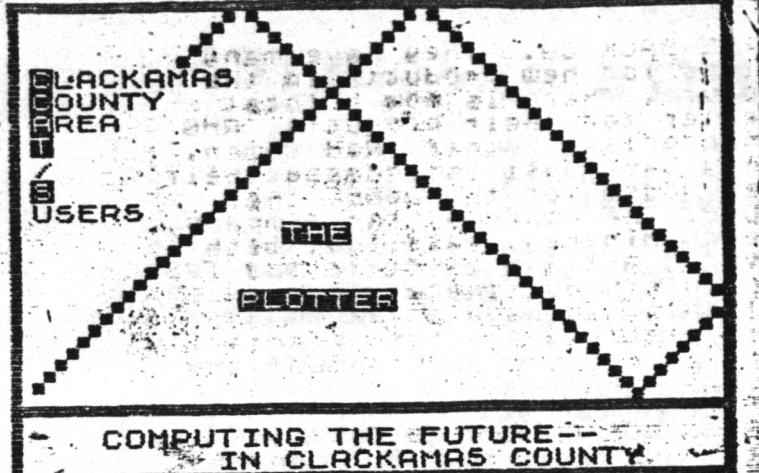
Our next meeting will be held:

on: THUR AUG. 2, 1984  
at: 7:00 PM  
in: RM 101, COMM CENTER  
CCC OREGON CITY

We hope to be able to demo the Modems as we had planned to do at the last meeting. We hope to have all three models on display and working. The T/S 2050 from Westridge and the two models from BYTE-BACK.

Be sure to attend>>>>

You may enjoy it!!!!



## SCROLLING

SCROLL WITH T/S 1000 AND 2068

SEE MARK FISHERS ARTICLE IN OUR MARCH/APRIL ISSUE OF SYNC MAGAZINE. THE T/S HAS SCROLL CONTROLS AS USED IN LISTING NO. 1. THIS PROGRAM LISTS THE ADDRESSES, CHARACTER CODE, AND SYMBOLS OF THE PROGRAM, AND SCROLLS UNTIL THE LAST LINE IS PRINTED.

THE 2068 DOES NOT PROVIDE THIS CONTINUOUS SCROLL UNLESS A KEY IS HELD DOWN WHEN SCROLL? IS ON THE SCREEN, AND THEN IT IS FAST.

TRY PROGRAM NO. 2 FOR A SLOWER SCROLL, TO CONTINUE THE SCROLL JUST PRESS A KEY AFTER SCROLL? APPEARS.

TO DELETE SCROLL? AND GET AN AUTOMATIC SCROLL TO THE LAST LINE ADD THIS LINE, 140 POKE 23692,10 WHERE 10 CAN BE FROM 1 TO 255.

```
10 REM SAMPLE PROGRAM NO. 1
20 FOR N=16509 TO 16608
30 SCROLL
40 PRINT N;" ";PEEK N; TAB 10;
   CHR$ PEEK N
50 NEXT N
```

```
100 REM SAMPLE PROGRAM NO. 2
110 FOR X=PEEK 23635+256*PEEK
   23636 TO PEEK 23627+256*
   PEEK 23628
120 PRINT
130 PAUSE 10
150 NEXT X
```

## WHAT YOU'LL FIND -IN THIS ISSUE-

MEETINGS	PAGE 1
CONTENTS	PAGE 1
SCROLLING-tip	PAGE 1
BITS AND BYTES	PAGE 2
T/S HELPLINE	PAGE 2
ARTICLE-	PAGE 3
T/S 1000 Plotting	Pt 2
2068 Break & Save	
ZX/TS P and R	PAGE 3
HARDWARE REVIEW	PAGE 4
Boss Joystick	
EDITORIAL	PAGE 4

# \*\*\*\*\* BITS and BYTES

It's good to be back from 4 weeks on the road, at least for the most part.

The only bad part was the pile of mail waiting to be gone over and sorted. But then we do get a lot of news from the mailbox.

NOTE: All of our readers who have purchased a UP32 from Rod Gowen can get a free copy of the latest version if they will bring their old version or a blank tape. Call 655-7484 for more information.

As you may know by now, TIMEX SINCLAIR USER is dead for good. They did not give us a choice as to what we would get. They said "You will receive K-POWER" and that is what we are receiving.

As for SYNC, we have heard nothing new since we requested a refund.

We are now receiving ZX COMPUTING as of the JUNE-JULY issue. Hope a lot of you get a chance to enjoy it.

Rod Gowen of RMG Enterprises says that the BYTE-BACK are finally arriving. There are some bugs to be worked out. Hopefully it will not take too long.

We are now receiving about 12 newsletters from other groups. We have even begun to receive subscription requests and even a couple of checks.

We have not yet received the TIMEX TECHNICAL MANUAL that we have on order.

We are hearing a lot of rumors as we always do, just keep in touch with us and we will try to sort out fact from fiction.

We are still looking for any and all contributions for the newsletter.

Our Library is now at a stage where it is just too large to carry to the meetings, so we will only have the latest two issues of the mags at the meeting. The Library will be accessible by calling 655-7484 to set up a time.

We have been and will probably continue to receive all kinds of advertising which we are assembling into a looseleaf book for reference. It is in the library if you wish to look.

us reprint any of the articles that he is writing for the PATS newsletter. Thanks Kevin, we can use the help.

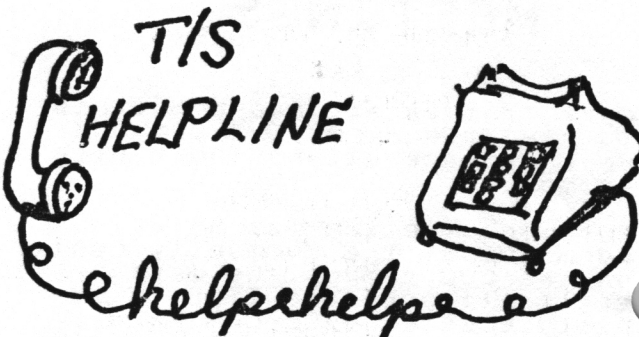
Let's there be any confusion regarding the modems, the one from WESTRIDGE COMM. is manufactured by ANCHOR ELECTRONICS and is being sold by RMG locally and by CURRY ELECTRONICS in Phoenix as well as many other dealers across the country. The one that TIMEX did not take delivery on.

From what we can see, there is a growing supply of backers out there. All they (and we) need is a lot of support. LET'S SUPPORT THEM!!!!

That's all for now.

MORE NEWS LATER- STAY TUNED\*\*\*\*\*

\*\*\*\*\*



T/S HELPLINE

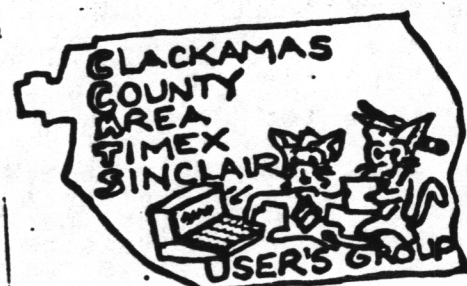
NEED HELP? COMPUTER GOT YOU STUMPED? DON'T GIVE UP!

JUST CALL YOUR FRIENDLY HELPLINE NUMBERS:

655-7484 655-9670  
266-4712

More tips next time.

\*\*\*\*\*





# ARTICLE

## A STUDY OF PLOT ON THE 1000

### PART 2

Dick Wagner

Page 65 of the manual has a statement about combining PRINT and PLOT. If PRINT position moves to the first space after PLOT then the PRINT character is overprinted by PLOT and we have lost it. The exception is if PLOT is moving upward as in my program on page 5 of December issue of THE PLOTTER. BY using a right-to-left PLOT we can leave a PRINT character on the screen (lines 20&30) and wipe out the PLOT pixel with lines 50 & 60.

To put this to example:

```
10 PRINT AT 0,10; "PLOT PROGRAM"
20 FOR N= 48 TO 9 STEP-1
30 PLOT N,41
40 PRINT "-"
50 UNPLOT N,41
60 NEXT N
```

The 41 places the PLOT in PRINT row 1, as would 40. The bar is actually a PRINT position in the middle of the space. In fact any character or combination (word) you want to display can be PRINTED in this way. The y coordinate (second number) can be even or odd but must correspond to the PRINT row.

Another example is to PLOT a display using a character such as (\*).

```
10 FOR N=60 TO 0 STEP-3
20 PLOT N, 22 + 20*
   SIN (N/32*PI)
30 PRINT "*"
40 UNPLOT N, 22 + 20*
   SIN ((N/32*PI)
50 NEXT N
```

STEP-3 is used to keep from bunching the points at some locations. Try -1, -2 & -5 to see the difference. Remember that the points are actually PRINT and not PLOT.

To my knowledge there is no other way to PLOT in Basic with characters.

\*\*\*\*\*

## BREAKING & SAVING 2068 PROGRAMS by Dennis Juries

Most programs that you can purchase for the 2068 when loaded start running and if you try breaking into them they dump, lock up the computer, or will not accept the break command. These programs usually consist of at least three programs in one. The first part consists of a simple loader that tells the computer to load the SCREEN\$ and load the machine code program and may have some basic program that intermixes with the machine code program. The first part may be hidden when you break into it by having the BOARDER, PAPER, and INK colors all the same. Change the paper color if this is so and relist it.

The following procedure

MC - machine code  
program name  
Basic - basic program  
name  
Screen - screen string  
program name

1. LOAD the program until the screen display is displayed then BREAK and LIST. This listing will give you the starting address of the machine code (found in the line RAND USR #), the name of the MC, and SCREEN\$ programs.
2. LOAD the MC program (LOAD "MC" CODE)
3. PEEK the MC program looking for the length. This can be done by looking in the MC until you find a long group of 0's (say 32).
4. SAVE "Basic" LINE 1  
SAVE "Screen" SCREEN\$  
SAVE "MC" CODE #1, #2  
#1 is the starting address from RAND USR.  
#2 is the length of the MC routine determined by subtracting the starting address from the ending address found when you peeked the MC and found the start of the 0's or by using the top of memory 65535 (IE, say start address from RAND USR 42000: 65535-42000 = 23535 then SAVE "MC" CODE 42000, 23535).
5. After completing the above and VERIFYING each step, press NEW and ENTER. LOAD the program copy you just made and try it out.

\*\*\*\*\*

ZX/TS P and R  
WILL RETURN

BOSS CONTROL STICK FOR 2068  
Dick Wagner

The BOSS stick is suitable for on-off control situations that may take the place of the 5,6,7,8 and 0 keys. The fire button (0) is on the top of the handle convenient for thumb actuation. The handle moves in all quadrants and is spring loaded for centering by the leaf spring switches (4). Construction is such that none of the switches can be forced, and the handle will turn so it will not be damaged by excitable types.

This stick meets the requirements for STICK commands as covered in the manual pages 173-175. As it is possible to make double switch contact between adjacent switches, programs can move the image in 8 directions. A good buy at \$12.95 from RMG ENTERPRISES.

Programs that use INKEY\$ and the above keys can be changed to STICK control as in INKEY\$ "6". Just substitute STICK (1,1)=2. The theory of the number system is binary so 1,2,4,&8 are used. Therefore upleft is 5 as the sum of 1 and 4.

You must decide which side of the computer will be used for plug-in. The left side is STICK (1,1) and the right side is (1,2), 1 being handle control. FIRE is (2,1) or (2,2).

Expect a later report on the ZEBRA stick adaptor for the 1000 computer.

Here we are, over halfway through the summer. Hope everyone is having an enjoyable sunny season. I know that at this time of year, a lot of us are more apt to be outside in the garden than are inside slaving over a hot T/S. I'm no exception to this. I have been neglecting my duties and now it is time to go back to work, so here I am, working.

I am very pleased to see and hear from new people regarding the T/S computers. I have had several calls and letters in the past few weeks from people who were about to quit and or move on to another brand of computer. It only goes to prove that we need to let more people know that we are here.

To illustrate: I read an ad in the Oregonian placed by someone who wanted to sell a T/S 1000, a 2040 printer, a dozen tapes, several magazines and several books. The Computer was in a Suntronics keyboard and had a Suntronics 16K RAM. All for \$150. I called and talked to him and it turned out that he felt that he had taken the unit to its limit. He was going to buy a Commodore 64!!

After a little discussion, he came out to the house and we worked out a trade for a 2068. AND he will be at the August meeting to join our group!

Whew!! Saved another one! Hopefully we and he will be happy.

Point!! LET THE WORLD KNOW WE ARE HERE AND WILLING TO HELP. SPREAD THE WORD---

T/S MACHINES AND USERS  
ARE NOT A DYING BREED!!

WE ARE ALIVE AND GROWING\*\*\*

#####

CCAT/S

1419 1/2 7th Street  
Oregon City, OR 97045